
Release 3.1a John F. Collins, Biocomputing Research Unit.
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W E S E R (TM)

Run on: Sat May 13 09:35:48 2000; MasPar time 3.96 Seconds
Tabular output not generated.

Title: >US-09-331-631-1
Description: (74-116) from US09331631.pep (3 of 5)
Perfect Score: 344
Sequence: 1 NOEDPQTECCOQCRRCROESGPRQOQYCORCKEICEEERY 43

Scoring table: PAM 150
Gap 11

Searched: 188963 seqs, 23666106 residues

Post-processing: Minimum Match 0%
Listing first 45 summaries

Database: a-geneseq35
1:geneseqp

Statistics: Mean 22.277; Variance 95.380; scale 0.234

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description	Pred. No.
1	344	100.0	666	1	Macadamia integrifolia	7.91e-24
2	342	99.4	666	1	Macadamia integrifolia	1.23e-23
3	337	98.0	625	1	Macadamia integrifolia	3.73e-23
4	162	47.1	525	1	Macadamia integrifolia	1.03e-06
5	162	47.1	566	1	Theobroma cacao anti1	1.03e-06
6	129	37.5	590	1	Sequence encoded by 67	9.03e-04
7	113	32.8	28	1	Gossypium hirsutum ant	2.22e-02
8	111	32.3	593	1	Stenocarpus sinuatus a	3.29e-02
9	105	30.5	33	1	Zea mays antimicrobial	1.07e-01
10	96	27.9	35	1	Antimicrobial maize pe	6.11e-01
11	85	24.7	637	1	R21079	1.11e-01
12	83	24.1	106	1	W62837	7.13e+00
13	83	24.1	107	1	Hordeum vulgare anti1	7.13e+00
14	82	23.8	626	1	ACANAP24.	7.13e+00
15	80	23.3	441	1	ACANAP23.	8.58e+00
16	80	23.3	441	1	Peanut allergen Ara hi	1.24e+01
17	80	23.3	919	1	Steroid hormone recept	1.24e+01
18	80	23.3	919	1	Peroxisome proliferato	1.24e+01
19	77	22.4	614	1	Human androgen recept	1.24e+01
20	77	22.4	614	1	Human androgen recept	1.24e+01
21	77	22.4	614	1	Human androgen recept	1.24e+01
22	76	22.1	439	1	Human androgen recept	1.24e+01
23	76	22.1	440	1	Mouse peroxisome proli	2.58e+01

ID	Score	Query Match	Length	ID	Description	Pred. No.	
24	76	22.1	440	1	R92479	Peroxisome proliferato	2.58e+01
25	76	22.1	910	1	R91737	HER4-1g fusion protein	2.58e+01
26	76	22.1	1058	1	R54843	HER4 with alternate 3'	2.58e+01
27	76	22.1	1058	1	R91734	Receptor tyrosine kina	2.58e+01
28	76	22.1	1308	1	R91733	Receptor tyrosine kina	2.58e+01
29	76	22.1	1308	1	R54841	HEH4.	2.58e+01
30	74	21.5	805	1	R80581	Murine Ah receptor pro	3.71e+01
31	73	21.2	768	1	R27683	Rabbit beta-8 intergri	4.44e+01
32	72	20.9	468	1	R74053	Human peroxisome proli	5.31e+01
33	71	20.6	405	1	W33737	Epidermal growth facto	6.35e+01
34	71	20.6	509	1	R38210	LDLDD34 EGF receptor t	6.35e+01
35	71	20.6	529	1	R38209	LDLDD23 Apal. EGF recep	6.35e+01
36	70	20.3	516	1	P61362	Soybean glycinin A3B4	7.59e+01
37	69	20.1	204	1	W59609	DNA-binding/dimerisati	9.06e+01
38	69	20.1	402	1	W57410	Human Epi-3-V receptor.	9.06e+01
39	69	20.1	898	1	W31853	Mycobacterium tubercu	9.06e+01
40	68	19.8	55	1	W80489	Murine vascular endoth	1.08e+02
41	68	19.8	145	1	W86213	Human VEGF-B truncated	1.08e+02
42	68	19.8	190	1	R91710	AcenAP4.	1.08e+02
43	68	19.8	220	1	W18652	Human apolipoprotein E	1.08e+02
44	68	19.8	1003	1	W41301	AmBPV oncomopovirus s	1.08e+02
45	68	19.8	1786	1	W50893	Human laminin B1 chain	1.08e+02

ALIGNMENTS

RESULT 1
ID W62828 standard; Protein; 666 AA.
AC W62828;
DE 27-OCT-1998 (first entry)
DE Macadamia integrifolia antimicrobial protein.
KW antimicrobial protein; infestation; control.
OS Macadamia integrifolia.
FH Key Location/Qualifiers
FT peptide 1..28 /note="signal peptide"
FT Protein 29..666 /note="mature protein"
PN W09827805-A1.
PD 02-JUL-1998.
PF 22-DEC-1997; AU0874.
PR 20-DEC-1996; AU-004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
DR WPI: 98-377279/32.
DR N-PSDB: V42310.
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
useful for controlling microbial infestations of plants or mammals
PS Claim 1; Page 34-36; 96pp: English.
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
SQ Sequence 666 AA:

Query Match 100.0%; Score 344; DB 1; Length 666;
Best local similarity 100.0%; Pred. No. 7.91e-24;
Matches 43; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 74 NOEDPQTECCOQCRRCROESGPRQOQYCORCKEICEEERY 116
QY 74 NOEDPQTECCOQCRRCROESGPRQOQYCORCKEICEEERY 116

RESULT 2
ID W62829 standard; Protein; 666 AA.
AC W62829;
DE 27-OCT-1998 (first entry)
DE Macadamia integrifolia antimicrobial protein.
KW antimicrobial protein; infestation; control.
OS Macadamia integrifolia.
FH Key Location/Qualifiers
FT peptide 1..28 /note="signal peptide"

FT Protein 29.666
/note="mature protein"
PN WO9827805-A1.
PD 02-JUL-1998.
FE 22-DEC-1997: AU0874.
PR 20-DEC-1996: AU-004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
DR WPI: 98-377279/32.
N-PSDB: V42311.
PI Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT useful for controlling microbial infestations of plants or mammals
PS Claim 1: Page 39-41; 96pp; English.
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
SQ Sequence 666 AA;

Query Match 99.4%; Score 342; DB 1; Length 666;
Best Local Similarity 95.3%; Pred. No. 1.23e-23;
Matches 41; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

DB 74 NOEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 116
QY 74 NOEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 116

RESULT 3
ID W62830 standard; Protein; 625 AA.
AC W62830:
DT 27-OCT-1998 (first entry)
KW Macadamia integrifolia antimicrobial protein.
DE antimicrobial protein; infestation; control.
OS Macadamia integrifolia.
FH Key Location/Qualifiers
FT Peptide 1..28
FT /note="signal peptide"
FT 29..666
FT Protein /note="mature protein"
PN WO9827805-A1.
PD 02-JUL-1998.
FE 22-DEC-1997: AU0874.
PR 20-DEC-1996: AU-004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
DR WPI: 98-377279/32.
N-PSDB: V42316.
PI Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT useful for controlling microbial infestations of plants or mammals
PS Claim 1: Page 43-45; 96pp; English.
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
SQ Sequence 625 AA;

Query Match 98.0%; Score 337; DB 1; Length 625;
Best Local Similarity 97.7%; Pred. No. 3.73e-23;
Matches 42; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

DB 33 NOEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 75
QY 74 NOEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 116

RESULT 4
ID W62831 standard; Protein; 525 AA.
AC W62831:
DT 27-OCT-1998 (first entry)
KW Theobroma cacao antimicrobial protein.
DE antimicrobial protein; infestation; control.
OS Theobroma cacao.
PN WO9827805-A1.
PD 02-JUL-1998.

PF 22-DEC-1997: AU0874.
PR 20-DEC-1996: AU-004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
DR WPI: 98-377279/32.
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT useful for controlling microbial infestations of plants or mammals
PS Claim 1: Page 47-49; 96pp; English.
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
SQ Sequence 525 AA;

Query Match 47.1%; Score 162; DB 1; Length 525;
Best Local Similarity 50.0%; Pred. No. 1.03e-06;
Matches 20; Conservative 9; Mismatches 11; Indels 0; Gaps 0;

DB 78 EEELORQYQCCGRCRCROESGPRQOQYQCRCKEICEEEY 117
QY 75 QEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 114

RESULT 5
ID R20181 standard; Protein; 566 AA.
AC R20181:
DT 16-APR-1992 (first entry)
KW Sequence encoded by 67 kD T. cacao protein cDNA.
DE Cocoa; flavour; vicillin; seed storage protein.
OS Theobroma cacao.
PN WO9119801-A.
PD 26-DEC-1991.
PF 07-JUN-1991; G00914.
PR 11-JUN-1990; GB-013016.
PA (MRC) MARS UK LTD.
PI Spencer ME, Hodge R, Deakin EA, Ashton S;
DR WPI: 92-024418/03.
N-PSDB: Q20377.
PT Recombinant cocoa proteins - are responsible for flavour in cocoa
PT beans and produced in large quantities using yeast and bacterial
PT expression vectors
PS Claim 4: Fig 2: 59pp; English.
CC The inventors claim a 67 kD and 31 kD T. cacao protein, and
CC fragments, and encoding DNAs. The 47 kD and 31 kD proteins are
CC derived from the 67 kD precursor. T. cacao protein cDNA was
CC detected in a cDNA library prepared from immature cocoa beans RNA
CC using a probe based on the AA sequence of a CNBR peptide common to
CC the 47 kD and 31 kD polypeptides. Homology searches revealed close
CC homologies between the 67 kD polypeptide and the vicillins, which are
CC seed storage proteins.
SQ Sequence 566 AA;

Query Match 47.1%; Score 162; DB 1; Length 566;
Best Local Similarity 50.0%; Pred. No. 1.03e-06;
Matches 20; Conservative 9; Mismatches 11; Indels 0; Gaps 0;

DB 78 EEELORQYQCCGRCRCROESGPRQOQYQCRCKEICEEEY 117
QY 75 QEDPOTECOCQRCRCROESGPRQOQYQCRCKEICEEEY 114

RESULT 6
ID W62832 standard; Protein; 590 AA.
AC W62832:
DT 27-OCT-1998 (first entry)
KW Gossypium hirsutum antimicrobial protein.
DE antimicrobial protein; infestation; control.
OS Gossypium hirsutum.
PN WO9827805-A1.
PD 02-JUL-1998.
PF 22-DEC-1997: AU0874.
PR 20-DEC-1996: AU-004275.
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;

PN GB2265376-A.
PD 29-SEP-1993.
PF 23-MAR-1993; 006043.
PR 24-MAR-1992; US-857055.
PA (MERI) MERCK & CO INC.
PI Rodan GA, Rutledge SJ, Schmidt A, Vogel RJ.

Search completed: Sat May 13 09:35:56 2000
Job time : 8 secs.

